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Governor  
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Lieutenant Governor

## NEW MEXICO ENVIRONMENT DEPARTMENT

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BUTCH TONGATE  
Acting Cabinet Secretary  
J.C. BORREGO  
Acting Deputy Secretary

### **Certified Mail - Return Receipt Requested**

August 23, 2016

The Honorable David Venable, Mayor  
Village of Cloudcroft  
Post Office Box 317  
Cloudcroft, New Mexico 88317

**Re: Village of Cloudcroft Wastewater Treatment Plant; Minor; Municipal Individual Permit; SIC 4952; Compliance Evaluation Inspection; NPDES Permit NM0023370; August 11, 2016**

Dear Mayor Venable:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas  
US Environmental Protection Agency, Region VI  
Enforcement Branch (6EN-WM)  
Fountain Place  
1445 Ross Avenue  
Dallas, Texas 75202-2733

Sarah Holcomb  
New Mexico Environment Department  
Surface Water Quality Bureau  
Point Source Regulation Section  
P.O. Box 5469  
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Sandra Gabaldon at (505) 827-1041 or at [sandra.gabaldon@state.nm.us](mailto:sandra.gabaldon@state.nm.us).

Sincerely,

Sarah Holcomb  
Acting Program Manager  
Point Source Regulation Section  
Surface Water Quality Bureau

cc: Brent Larsen, USEPA (6WQ-PP) by e-mail  
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail  
Racquel Douglas, USEPA (6EN-WM) by e-mail  
Gladys Gooden-Jackson (6EN-WC) by e-mail  
Tung Tguyen, (6EN-WQ) by email  
NMED District III by email



Form Approved  
OMB No. 2040-0003  
Approval Expires 7-31-85

## NPDES Compliance Inspection Report

### Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 <input type="text" value="N"/> 2 <input type="text" value="5"/> 3 <input type="text" value="N"/> <input type="text" value="M"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="3"/> <input type="text" value="3"/> <input type="text" value="7"/> <input type="text" value="0"/> 11 12 <input type="text" value="1"/> <input type="text" value="6"/> <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="1"/> <input type="text" value="1"/> 17 18 <input type="text" value="C"/> 19 <input type="text" value="S"/> 20 <input type="text" value="1"/>					
<input type="text" value="M"/> <input type="text" value="I"/> <input type="text" value="N"/> <input type="text" value="O"/> <input type="text" value="R"/> <input type="text" value="W"/> <input type="text" value="W"/> <input type="text" value="T"/> <input type="text" value="P"/>					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> 69	70 <input type="text" value="2"/>	71 <input type="text" value="N"/>	72 <input type="text" value="N"/>	73 <input type="text" value=""/> <input type="text" value=""/>	74 75 <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> 80

### Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <b>CLOUDCROFT WWTP –</b> Highway 82, east, just west of Cloudcroft. Before entering the village, there will be a turnoff to the plant on the right side of HWY 82. <b>OTERO COUNTY</b>	Entry Time /Date 1220 Hours / August 11, 2016	Permit Effective Date September 1, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Scott Powell, Operator IV, (575) 682-2411	Exit Time/Date 1400 Hours / August 11, 2016	Permit Expiration Date August 31, 2017
Name, Address of Responsible Official/Title/Phone and Fax Number The Honorable Mayor David Venable Village of Cloudcroft Post Office Box 317 Cloudcroft, New Mexico 88317 (575) 682-2411	Other Facility Data N. 32°57'45.83" W. -105° 44'45.70" SIC 4952	
Contacted Yes <input type="checkbox"/> No <input type="checkbox"/> *		

### Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

<input type="text" value="S"/> Permit	<input type="text" value="U"/> Flow Measurement	<input type="text" value="U"/> Operations & Maintenance	<input type="text" value="N"/> CSO/SSO
<input type="text" value="U"/> Records/Reports	<input type="text" value="U"/> Self-Monitoring Program	<input type="text" value="S"/> Sludge Handling/Disposal	<input type="text" value="N"/> Pollution Prevention
<input type="text" value="M"/> Facility Site Review	<input type="text" value="N"/> Compliance Schedules	<input type="text" value="N"/> Pretreatment	<input type="text" value="N"/> Multimedia
<input type="text" value="S"/> Effluent/Receiving Waters	<input type="text" value="M"/> Laboratory	<input type="text" value="N"/> Storm Water	<input type="text" value="N"/> Other:

### Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Please see checklist and further explanations for details of findings

Name(s) and Signature(s) of Inspector(s) Sandra Gabaldon, Environmental Scientist / Specialist	Agency/Office/Telephone/Fax NMED/SWQB/(505) 827-1041/(505) 827-0160	Date
Signature of Management QA Reviewer Jennifer Foote, Municipal Team Leader	Agency/Office/Phone and Fax Numbers NMED/SWQB/(505) 827-2795/(505) 827-0160	Date

VILLAGE OF CLOUDCROFT WASTEWATER TREATMENT PLANT		PERMIT NO. NM0023370	
SECTION A – PERMIT VERIFICATION			
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u> )	
DETAILS: Permit Expires in August 2017. Operator was made aware of the requirements in Part III, A.4. Duty to Reapply.			
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES		<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
4. ALL DISCHARGES ARE PERMITTED		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
SECTION B – RECORDKEEPING AND REPORTING EVALUATION			
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u> )	
DETAILS:			
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA	
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
b) NAME OF INDIVIDUAL PERFORMING SAMPLING		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
c) ANALYTICAL METHODS AND TECHNIQUES.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
d) RESULTS OF ANALYSES AND CALIBRATIONS.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
e) DATES AND TIMES OF ANALYSES.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
f) NAME OF PERSON(S) PERFORMING ANALYSES.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
SECTION C – OPERATIONS AND MAINTENANCE			
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u> )	
DETAILS:			
1. TREATMENT UNITS PROPERLY OPERATED.		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
2. TREATMENT UNITS PROPERLY MAINTAINED.		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA	
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED .		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA	
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
5. ALL NEEDED TREATMENT UNITS IN SERVICE		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	

VILLAGE OF CLOUDCROFT WASTEWATER TREATMENT PLANT		PERMIT NO. NM0023370
SECTION C – OPERATIONS AND MAINTENANCE (CONT'D)		
9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
SECTION D – SELF-MONITORING		
PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. DETAILS:		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u> ).
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
b) PROPER PRESERVATION TECHNIQUES USED.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE’S SELF-MONITORING REPORT?		<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
SECTION E – FLOW MEASUREMENT		
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. DETAILS:		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u> .)
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE – 3” Parshall Flume		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
4. CALIBRATION FREQUENCY ADEQUATE. RECORDS MAINTAINED OF CALIBRATION PROCEDURES. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6. HEAD MEASURED AT PROPER LOCATION.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
SECTION F – LABORATORY		
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. DETAILS:		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u> .)
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA

VILLAGE OF CLOUDCROFT WASTEWATER TREATMENT PLANT						PERMIT NO. NM0023370	
SECTION F - LABORATORY (CONT'D)							
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
4. QUALITY CONTROL PROCEDURES ADEQUATE.						<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA	
5. DUPLICATE SAMPLES ARE ANALYZED. <u>0</u> % OF THE TIME.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
6. SPIKED SAMPLES ARE ANALYZED. <u>  </u> % OF THE TIME.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
7. COMMERCIAL LABORATORY USED.						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
LAB NAME <u>Aqua Environmental Testing Laboratory</u>							
LAB ADDRESS <u>103 Via Aguila, Ruidoso, NM</u>							
PARAMETERS PERFORMED <u>BOD, TSS, E. coli</u>							
SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u> ).							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001							
RECEIVING WATER OBSERVATIONS <u>Outfall location is in a canyon and inaccessible to the inspector with brush and rough terrain. Effluent was observed at manhole prior to discharge to canyon.</u>							
SECTION H - SLUDGE DISPOSAL							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. DETAILS:				<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u> ).			
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: <u>N/A</u> (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)							
SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED <u>  </u> ). <i>No Samples taken during this inspection.</i>							
1. SAMPLES OBTAINED THIS INSPECTION.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
2. TYPE OF SAMPLE OBTAINED GRAB <u>                    </u> COMPOSITE SAMPLE <u>  </u> METHOD <u>                    </u> FREQUENCY <u>                    </u>							
3. SAMPLES PRESERVED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
4. FLOW PROPORTIONED SAMPLES OBTAINED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
7. SAMPLE SPLIT WITH PERMITTEE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.						<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	

**VILLAGE OF CLOUDCROFT WASTEWATER TREATMENT PLANT**

**NPDES PERMIT NUMBER: NM0023370**

**COMPLIANCE EVALUATION INSPECTION**

**DATE OF INSPECTION: AUGUST 11, 2016**

**FURTHER EXPLANATIONS:**

Introduction:

On August 11, 2016 Sandra Gabaldón, accompanied by Daniel Valenta, of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), conducted a Compliance Evaluation Inspection (CEI) at the Village of Cloudcroft Wastewater Treatment Plant (WWTP) in Otero County, Cloudcroft, New Mexico.

The Cloudcroft WWTP is classified as a minor municipal discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0023370. This permit regulates the WWTP discharge to a dry canyon, thence to Fresno Canyon in Segment 20.6.4.801 of the Tularosa Basin according to the *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4. NMAC (as amended June 5, 2013)*. This segment is classified as a *CLOSED BASIN, with designated uses of: Irrigation, domestic water supply, high quality coldwater aquatic life, livestock water, wildlife habitat, and primary contact*.

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit. This inspection report is based on information provided by the Permittee's representatives, observations made by the NMED personnel and records and reports kept by the permittee and / or NMED.

Upon arrival at approximately 1220 hours, the inspector contacted Mr. Scott Powell and asked him to meet her at the WWTP. When Mr. Powell arrived, the inspector, Ms. Gabaldon, made introductions, explained the purpose of the inspection and presented her credentials to Mr. Powell. The inspector and operator proceeded with a tour of the facility, records review and an exit conference with Mr. Powell at the Village offices.

### Issues facing the WWTP:

Cloudcroft has a population of approximately 667 people (2010 Census) year round, but that increases to approximately 2,000 during the tourist season when golfing during the summer and skiing during the winter are activities enjoyed at this high mountain village (approximately 9,000 feet above sea level). The Village of Cloudcroft depends on snowmelt to regenerate their aquifers and springs. During the prolonged drought, snowmelt decreased and the Village has had a shortage of water. In a state of emergency in 2004, the Village was forced to haul water in tankers to sustain the population. Because of this, the Village requested and received funds to build a new treatment facility in order to provide the Village with non-potable and potable water sources. These funds came from the Water Innovation Fund under former Governor Bill Richardson. Other funds came from the State Water Trust Board and annual grants from the State Legislature.

The new system will consist of preliminary filtration through fine screens to exclude grit, and then will undergo aerobic biological treatment, and then the membrane bioreactor (MBR) which separates the liquid from any suspended solids. The membrane's pores will admit no particles greater than 0.1 microns which is capable of removing bacteria, pathogens and viruses. The water will then be disinfected and moved to a storage tank prior to being pumped to the water treatment facility. At the water treatment facility, the water will go through reverse osmosis (RO) which further filters out particles larger than 0.001 microns and will undergo ultrafiltration (UF). At this point, the permeate (water which has passed through the filter) is disinfected again and sent to a covered storage tank where it mixes 50/50 with well/spring water to be used by the Village. Again, the Village hopes to have this completed by December 2015.

### Treatment Scheme (at the time of this inspection):

The Cloudcroft WWTP consists of the headworks, fine filtration, a clarigester, trickling filter, secondary clarifier, and chlorine contact chamber.

There are a total of three lift stations for this facility. The influent enters the headworks where grit and large debris are removed. The grit and debris are bagged and sent to the land fill for final disposal. There is a 6" Parshall flume with a totalizer that measures the influent flow.

The flow then enters the circular clarigester for primary settling. After leaving the clarigester, the flow is directed through a valve box and then to a covered trickling filter with rock media. Following the trickling filter, wastewater is sent to a circular secondary clarifier. Then, the flow



is sent to the serpentine chlorine contact chamber where it is disinfected with sodium hypochlorite and sent through a 3" Parshall flume for effluent flow measurement with a staff gauge. After traveling through the flume, effluent is de-chlorinated with sodium bisulfite and sent to the outfall.

Sludge:

Sludge from the clarigester is gravity fed through a drain line and then to a pit. There is a pump station located on HWY 182 for pumping the pit. The location of the pump station allows the septic hauler to remove waste twice a month without concerns of weather. Ruidoso Septic removes the waste and hauls it to the landfill for final disposal.

### Further Explanations:

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

### **Section B – Recordkeeping and Reporting – Overall rating “Unsatisfactory”**

Part II, Section D. Pollution Prevention Plan requires:

*The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing one) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:*

- a. The influent loadings, flow and design capacity;*
- b. The effluent quality and plant performance;*
- c. The age and expected life of the wastewater treatment facility's equipment;*
- d. Bypasses and overflows of the tributary sewerage system and treatment works;*
- e. New developments at the facility;*
- f. Operator certification and training plans and status;*
- g. The financial status of the facility;*
- h. Preventive maintenance programs and equipment condition and;*
- i. An overall evaluation of conditions at the facility.*

In Part III, Standard Conditions, Section C.4 Record Contents requires:

*Records of monitoring information shall include:*

- a. The date, exact place, and time of sampling or measurement;*
- b. The individual(s) who performed the sampling or measurement;*
- c. The date(s) and time(s) analyses were performed;*
- d. The individual who performed the analyses;*
- e. The analytical technique or methods used; and*
- f. The results of such analyses.*

### Findings for Recordkeeping and Reporting:

The permittee has failed to institute a pollution prevention program within 12 months of the effective date of the permit, September 12, 2012. The permittee is required to institute the pollution prevention plan to cover the items above as soon as possible. This pollution prevention plan should be updated when the new facility comes online.

The permittee provided bench sheets for the month of May 2016. The inspector reviewed the bench sheets for Total Residual Chlorine (TRC) and pH, which are done onsite by the operator, Mr. Powell.

The bench sheets for pH provide the “time”, but it is not clear if this is the time of sample or time of analysis. The inspector cannot verify that the pH was analyzed within the 15 minutes instantaneous grab sample requirements. The operator provided a bench sheet from May 27, 2016. The permit requires twice a month sampling for pH.

The permittee has yet to migrate to NetDMR. The permittee has received a letter from EPA requesting this be done. The operator stated he will take the webinar training and start using NetDMR as soon as possible.

### **Section C – Operations and Maintenance – Overall Rating of “Unsatisfactory”**

The Permit requires in Part III, Section B.3:

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.*
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.*

**Findings** for Operation and Maintenance:

The permittee has failed to implement emergency control procedures. This is an imperative part of the operation at the facility since it is located within the National Forest. Any fire that may occur needs to be addressed as an emergency and all employees need to be aware of any procedures that need to be taken with the chemicals that are onsite.

The facility is struggling at this time to maintain the treatment units for proper operation and maintenance. For example, the secondary clarifier does not have an adequate sludge blanket. However, the clarigester has nitrification occurring which suggests older microbes are not being sufficiently wasted. There is also significant short circuiting occurring in the secondary clarifier and there are also floatable solids seen in the secondary clarifier. The chlorine contact chamber appears dark in color, which may suggest a sludge blanket within the chlorine contact chamber.

**Section D – Self-Monitoring – Overall rating of “Marginal”**

The Permit requires in Part III, Section C.5:

- a. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by the Regional Director.*
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*
- c. An adequate analytical quality control program, including analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

**Findings** for Self-Monitoring:

The manner in which the operator is sampling TRC is questionable. The operator stated if the TRC sample is greater than what he expects, he will adjust the system and retake the sample. This method may suggest selective sampling. (a sample taken to deliberately screen out undesirable results).

The operator uses an Oakton PHTester 30 for pH analysis. However, the operator is not following the instructions provided with the pH meter. The operator is using distilled water for storage. The manual clearly states that the pH meter should be stored in “electrode storage solution or tap water via its protective cap.”

The operator uses a Hach Pocket Colorimeter II for Chlorine analysis. The chlorine reagent **expired** in January 2016. All further laboratory results for February, March, April, May, June, July and part of August, are invalid.

The chain of custody records from Aqua Environmental Testing Laboratory do not provide the temperature of the samples upon arrival at their laboratory. Samples for BOD analysis may degrade significantly during storage between collection and analysis, resulting in low BOD levels. It is unknown if the sample was at or below 4° C from the time of collection. TSS should also be stored at 4° C up to the time of analysis to minimize microbiological decomposition of solids. The laboratory should report the length and temperature of storage with the results provided to the permittee.

#### **Section E – Flow Measurement – Overall rating of “Unsatisfactory”**

The Permit requires in Part III.C.6, Flow Measurement:

*Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

**Findings** for Flow Measurement:

The operator calibrated the flow meter on August 27, 2015.

The permittee is not doing calibration checks to verify that the flow is within a 10% deviation with the totalizer compared with the actual flow.

#### **Section F – Laboratory – Overall rating of “Marginal”**

The Permit requires in Part III, Section C.5:

- a. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by the Regional Director.*
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*
- c. An adequate analytical quality control program, including analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

#### **Findings** for Laboratory:

The TRC bench sheets state the method used is 4500-Cl G DPD Colorimetric, but does not provide the Standard Methods Edition being cited. 40 CFR 136 has specific Standard Method (SM) Editions that are acceptable for compliance sampling. For instance, the TRC method was approved in 2000, and this is included in Standard Methods 21<sup>st</sup> Edition. Other SMs are outdated and no longer approved (18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>) for TRC. It is unknown if the permittee is using the correct method for TRC.

The permittee provided bench sheets from the contract laboratory, Aqua Environmental Testing Laboratory, in Ruidoso, NM. The laboratory analyzes pH, Temperature, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), E. coli and Ammonia (NH<sub>3</sub>-N). The BOD method being used is Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition. However, the approved method in 40 CFR 136 is the Standard Method 21<sup>st</sup> Edition. EPA no longer accepts the 20<sup>th</sup> Edition for compliance sampling.

The permittee is not performing duplicate samples as required by the quality control program. The purpose of laboratory control procedures is to ensure high-quality analyses by the use of control samples, control charts, reference materials, and instrument calibration. The laboratory must initiate and maintain controls throughout the analysis of samples. Specifically, each testing batch must contain at least one blank, standard, duplicate, and spiked (as applicable) sample analysis. When a batch contains more than 10 samples, every tenth sample should be followed by a duplicate and a spike (as applicable).

The precision of laboratory findings refers to the reproducibility or degree of agreement among replicate measurements of the same quantity. The closer the numerical values of the measurements come to each other, the more precise are the measurements. In a laboratory QC program, precision is determined by the analysis of actual samples in duplicate. These may represent a range of concentrations and a variety of interfering materials usually encountered during the analysis.

**NMED/SWQB**  
**Official Photograph Log**  
**Photo # 1**

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1243 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Clarigester		



**NMED/SWQB**



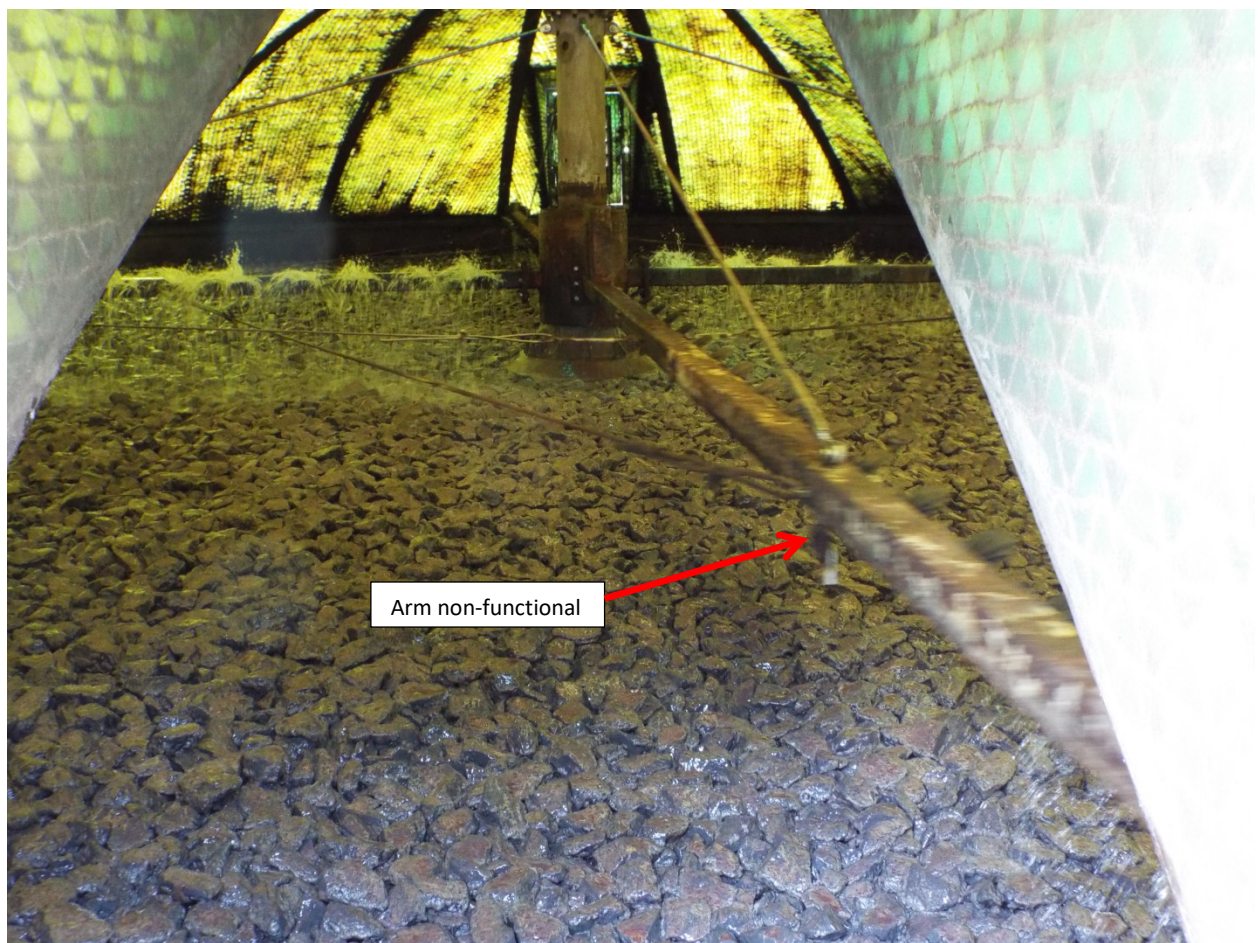
**Official Photograph Log**  
**Photo # 2**

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1241 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Clarigester with noticeable solids rising to surface with some nitrification occurring.		



**NMED/SWQB**  
**Official Photograph Log**  
**Photo # 3**

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1248 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Covered trickling filter		





**NMED/SWQB**  
**Official Photograph Log**  
**Photo # 4**

Photographer: Sandra Gabaldon	Date: July 30, 2015	Time: 1250 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Secondary clarifier – noticeable solids on the surface		



**NMED/SWQB**

**Official Photograph Log  
Photo # 5**

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1251 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Secondary clarifier – short circuiting		



**NMED/SWQB**



**Official Photograph Log  
Photo # 6**

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1258 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Chlorine Contact Chamber		



**NMED/SWQB**

Official Photograph Log  
Photo # 7

Photographer: Daniel Valenta	Date: August 11, 2016	Time: 1316 Hours
City/County: Village of Cloudcroft / Otero County		State: New Mexico
Location: Village of Cloudcroft WWTP		
Subject: Chlorine Reagent – Expired 2016		

